

**MICHIGAN AIRPORT DEVELOPMENT  
AID PROGRAM**

FEDERAL/STATE/LOCAL  
FOR

**OWOSSO COMMUNITY AIRPORT  
OWOSSO, MICHIGAN**



December 3, 2013

For the years  
**2014 – 2023**

Submitted by:

A handwritten signature in blue ink, appearing to read 'Richard Musson', written over a horizontal line.

Richard Musson, Chairman, Shiawassee Airport Board

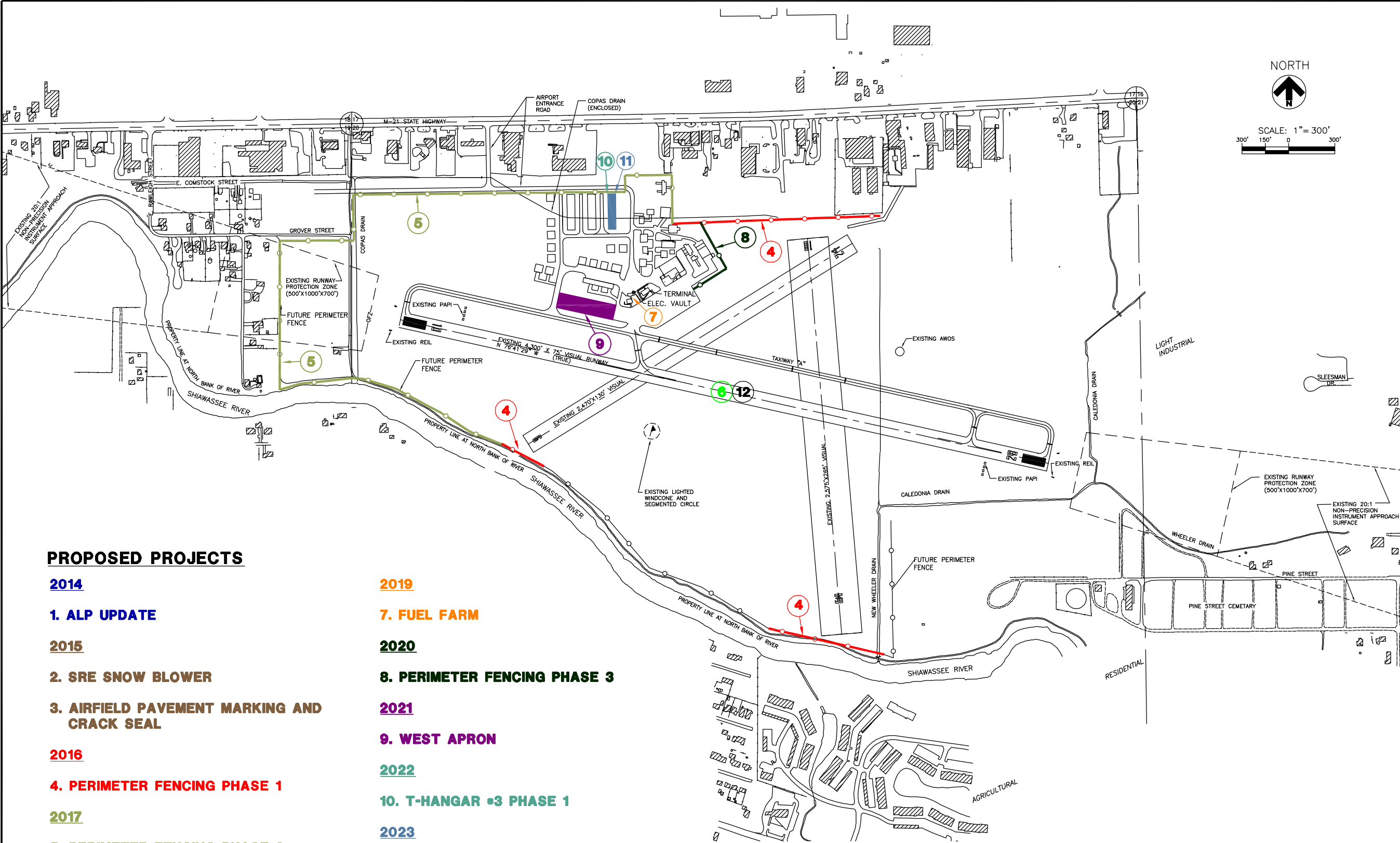
Prepared by:

**RS&H**

Reynolds, Smith and Hills, Inc.  
G-3101 W. Bristol Road  
Flint, Michigan 48507

MICHIGAN STATE BLOCK GRANT PROGRAM											
TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2014* to FY-2023											
*ACIP includes current development year (2013 already programmed - minor changes acceptable)											
Airport Name:   Owosso Community Airport								Airport Identifier: RNP		Date prepared:	

\*\*In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed



**PROPOSED PROJECTS**

**2014**

**1. ALP UPDATE**

**2015**

**2. SRE SNOW BLOWER**

**3. AIRFIELD PAVEMENT MARKING AND CRACK SEAL**

**2016**

**4. PERIMETER FENCING PHASE 1**

**2017**

**5. PERIMETER FENCING PHASE 2**

**2018**

**6. PREVENTATIVE MAINTENANCE OF AIRFIELD PAVEMENTS**

**2019**

**7. FUEL FARM**

**2020**

**8. PERIMETER FENCING PHASE 3**

**2021**

**9. WEST APRON**

**2022**

**10. T-HANGAR #3 PHASE 1**

**2023**

**11. T-HANGAR #3 PHASE 2**

**2024**

**12. PREVENTATIVE MAINTENANCE OF AIRFIELD PAVEMENTS**

NORTH



SCALE: 1" = 300'



**LEGEND:**

---	RUNWAY PROTECTION ZONE
---	RUNWAY APPROACH SURFACE
---	PROPERTY LINE
---	SECTION LINE
■	EXISTING AIRPORT BUILDING
▨	EXISTING NON AIRPORT BUILDING

**RS&H**  
IMPROVING YOUR WORLD

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**REVISIONS**

NO.	DESCRIPTION	DATE

DATE ISSUED: 07-12-11

REVIEWED BY: RTA

DRAWN BY: DMJ

DESIGNED BY: DMJ

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**SHEET TITLE**

**AIRPORT  
10 YEAR CIP**

**SHEET NUMBER**

**LOCATION: Owosso Community Airport**

Reynolds, Smith and Hills, Inc.

Date Prepared: 26-Nov-13

**PROJECT DESCRIPTION:**

Prepared By: DMJ

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**PRELIMINARY PROJECT COST ESTIMATE**

File Name: 2010-7-26 tstreet11 COST.xls

WORK ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
Mobilization	LSUM	1	\$15,000.00	\$15,000.00
Safety and Security	LSUM	1	\$3,000.00	\$3,000.00
Unclassified Excavation	EACH	1,000	\$8.00	\$8,000.00
Subbase Course, 12"	CYD	750	\$15.00	\$11,250.00
Base Course, 6"	CYD	380	\$35.00	\$13,300.00
3" Bituminous Asphalt Pavement	TON	375	\$75.00	\$28,125.00
6" Underdrain	LFT	1,400	\$11.00	\$15,400.00
Drainage Structure w/cover	EACH	2	\$1,500.00	\$3,000.00
12" RCP Pipe	LFT	200	\$35.00	\$7,000.00
Pavement Marking	LSUM	1	\$1,000.00	\$1,000.00
Turfing	ACRE	1.00	\$1,500.00	\$1,500.00
Topsoil	CYD	400	\$7.50	\$3,000.00
Subtotal				\$109,575.00
15% Contingency				\$16,000.00
<b>Total Preliminary Construction Cost</b>				<b>\$125,575.00</b>
<b>PROFESSIONAL SERVICES</b>				
Construction Services	LS	1	\$12,600.00	\$12,600.00
<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$138,000.00</b>

**Snow Removal Equipment Calculations**  
**Michigan State Block Grant Program - Non-Commercial Service**  
*\*Except for the Notes sections, the darkly shaded areas will automatically calculate*

Airport Name:   
Annual Aircraft Operations   
(MDOT AERO will provide upon request, if needed.)

Associated City:   
Average Annual Snowfall (inches):   
Source:

Current MASP Classification (i.e. CII, BII, etc.)  (refer to Table 36)

Clearance Time per AC 150-5200-30B (refer to Table 1-2)  hours

**Priority 1 (Critical) Snow Removal Areas**

**Primary Runway**

Designation:	<input type="text" value="4300"/>	length (ft) x	<input type="text" value="75"/>	width (ft)	=	<input type="text" value="322,500"/>	sq. ft.
Designation:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Designation:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<b>TOTAL</b>						<b>322,500</b>	

Notes:

**Parallel Taxiway and one or two principal connecting taxiways**

Designation:	<input type="text" value="4300"/>	length (ft) x	<input type="text" value="35"/>	width (ft)	=	<input type="text" value="150,500"/>	sq. ft.
Designation:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Designation:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Designation:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<b>TOTAL</b>						<b>150,500</b>	

Notes:

**Terminal, Cargo, and/or General Aviation Aprons** (Critical apron area assumed as 2/3 of the apron)

<input type="text" value="67"/> % Req' x	<input type="text" value="400"/>	length (ft) x	<input type="text" value="100"/>	width (ft)	=	<input type="text" value="26,800"/>	sq. ft.
<input type="text" value="67"/> % Req' x	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<input type="text" value="67"/> % Req' x	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<input type="text" value="67"/> % Req' x	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<b>TOTAL</b>						<b>26,800</b>	

If more of apron(s) is considered critical, written justification must be provided.

Notes:

**Other Critical Areas** (i.e. emergency service roads, ARFF access roads, NAVAIDs, & other areas deemed essential)

Describe:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Describe:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Describe:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
Describe:	<input type="text"/>	length (ft) x	<input type="text"/>	width (ft)	=	<input type="text" value="0"/>	sq. ft.
<b>TOTAL</b>						<b>0</b>	

Notes:

Total Priority 1 (Critical) Area	<input type="text" value="499,800"/>	sq. ft.
Snow Density (using 1" of snow at 25 lbs/cu ft.)	<input type="text" value="521"/>	tons
Minimum snow removal rate (70% efficiency)	<input type="text" value="248"/>	tons/hr

**Snow Removal Equipment Determination**

AC 150-5220-20	Eligible SRE Items	Quantity	Requirements and Assumptions
Rotary Plows (Chapter 2)	Snow Blower	1	Class I up to 600 tons/hr (Refer to Table 2-1 - Rotary Plow Capacities) The largest class is automatically populated based on tons/hr
Displacement Plows (Chapter 6)	Plow	2	2 x the # of eligible snow blowers (equal capacity to blower) If annual snowfall > 30 " or > 10,000 annual operations and at least 15" of snow.
Snowsweepers (Chapter 8)	Sweeper	enter manually	Considered Supporting Equipment as needed to complete snow removal operations in accordance with FAA AC 150/5220-20
Carrier Vehicles (Chapter 5)	Front End Loader/Tractor	enter manually	Considered Supporting Equipment as needed to complete snow removal operations in accordance with FAA AC 150/5220-20

Above table based on AC 150/5220-20, Chapter 6, Paragraph 38 (b & c) for Minimum Equipment Requirements.

If an airport requests more than the eligible quantities of snow removal equipment, additional justification must be submitted for determination of eligibility.

Sponsor Remarks:

MDOT will review sheet and make final determination of eligible SRE.

MDOT Use ONLY

## Airport Snow Removal Equipment Inventory Sheet

Airport Name: Owosso Community Airport

The airport has the following snow removal equipment:

	Equipment Type Example: Blower	Make Example: Oshkosh	Model	Year	Capacity (Tons/hour)	Funding Source (Include AIP grant number)	Size of Equipment	MDOT Use Only
1	Plow Truck	Chevrolet	Kodiak	2009		B-26-0075-1408	10' Blade Plow	
2								
3								
4								
5								
6								
7								
8								
9								
10								

\_\_\_\_\_  
Signature of Airport Sponsor Representative, Date

LOCATION: Owosso Community Airport			Reynolds, Smith and Hills, Inc.	
PROJECT DESCRIPTION: Perimeter Fencing Program			Date Prepared: 26-Nov-13	
			Prepared By: DMJ	
			Page 1 of 1	
PRELIMINARY PROJECT COST ESTIMATE				
WORK ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<u>Phase 1 Construction</u>				
Mobilization	LSUM	1	\$4,000.00	\$4,000.00
Safety and Security	LSUM	1	\$1,000.00	\$1,000.00
6' High Fence	LFT	3,000	\$25.00	\$75,000.00
6' High Gate	EACH	3	\$2,500.00	\$7,500.00
Subtotal				\$87,500.00
15% Contingency				\$13,100.00
Phase 1 Total Preliminary Construction Cost				\$100,600.00
<u>Phase 2 Construction</u>				
Mobilization	LSUM	1	\$15,000.00	\$15,000.00
Safety and Security	LSUM	1	\$1,200.00	\$1,200.00
6' High Fence	LFT	5,000	\$20.00	\$100,000.00
10' High Fence	LFT	1,000	\$25.00	\$25,000.00
6' High Gate - Powered	EACH	2	\$10,000.00	\$20,000.00
6' High Gate	EACH	4	\$2,500.00	\$10,000.00
Clear and Grub - Heavy Brush	ACRE	0.4	\$2,500.00	\$1,000.00
Clear and Grub - Light Brush	ACRE	1.5	\$1,000.00	\$1,500.00
Subtotal				\$173,700.00
15% Contingency				\$26,100.00
Phase 2 Total Preliminary Construction Cost				\$199,800.00
<u>Phase 3 Construction</u>				
Mobilization	LSUM	1	\$15,000.00	\$15,000.00
Safety and Security	LSUM	1	\$1,200.00	\$1,200.00
6' High Fence	LFT	2,000	\$20.00	\$40,000.00
10' High Fence	LFT	1,000	\$25.00	\$25,000.00
6' High Gate	EACH	4	\$2,500.00	\$10,000.00
Clear and Grub - Heavy Brush	ACRE	0.4	\$2,500.00	\$1,000.00
Clear and Grub - Light Brush	ACRE	1.0	\$1,000.00	\$1,000.00
Subtotal				\$93,200.00
15% Contingency				\$14,000.00
Phase 3 Total Preliminary Construction Cost				\$107,200.00
PROFESSIONAL SERVICES				
Design Services	LS	1	\$41,000.00	\$41,000.00
Construction Services - Phase 1	LS	1	\$8,000.00	\$8,000.00
Construction Services - Phase 2	LS	1	\$16,000.00	\$16,000.00
Construction Services - Phase 3	LS	1	\$9,000.00	\$9,000.00
TOTAL ESTIMATED PROGRAM COST				\$481,600.00